FEMP Monthly Update

DECEMBER 2004

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The ***FEMP MONTHLY UPDATE*** is prepared expressly for the Department of Energy's Office of Federal Energy Management Programs (FEMP). The purpose of the ***UPDATE*** is to provide FEMP management staff with timely information on topics relevant to the program. This includes the status of pending Federal and state legislation and summaries of public and private sector energy-related activities. The ***FEMP MONTHLY UPDATE*** is prepared for

DOE BULLETIN BOARD

***Short-Term Energy Outlook*, Energy Information Administration (EIA), December 2004**

Natural gas costs are high again this winter. Henry Hub prices are expected to average $6.03 per thousand cubic feet (mcf) in 2004, compared to $5.64 in 2003. Natural gas storage at 3,280 trillion cubic feet is 8 percent higher than one year ago, and 11 percent higher than the five-year average. Demand for natural gas is projected to increase by 3.7 percent in 2005, and as a result production will increase by 1.9 percent and improve the supply picture.

Heating oil expenditures are also high this winter with a 34 percent increase from last winter's levels. Propane heated household are expected to increase by 22 percent for expenditures this winter.

The projected average West Texas Intermediate price for the fourth quarter of 2004 is $49 per barrel. World petroleum growth is estimated to reach 3.3 percent growth this year and slow to 2.5 percent growth in 2005 as the world slows toward more sustainable rates. U.S. oil production is expected to grow next year due to rising production in the Federal Offshore Gulf of Mexico (refer to the Mineral Management Service's report "Gulf of Mexico Oil and Gas Production Forecast, 2004-2013," MMS OCS Report 2004-065 at http://www.gomr.mms.gov/homepg/whatsnew/techann/2004/2004-065.html).

Gasoline prices, dependent on oil prices, are expected to rise ¢10-15 per gallon by May 2005, reflecting the typical season increase and project rise in petroleum prices.

WHAT'S NEW ON THE FEMP WEBSITE

The Fall *FEMP Focus* can be read at http://www.eere.energy.gov/femp/newsevents/fempfocus_toc.cfm/volume=3.

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CONGRESSIONAL ACTIVITIES

CONGRESSIONAL SCHEDULE

The 108th Congress has adjourned for the year. The 109th Congress will assemble in January; however, the schedule has not been published. New members of the House and Senate will participate in orientation programs in early January and Congress may formally convene before the inauguration of President Bush.

STATUS OF PENDING AUTHORIZATION BILLS OF INTEREST TO FEMP

No new legislation of interest has been introduced during the past month.

During 2004, the House introduced a total of 5,431 bills and the Senate introduced a total of 3,035 bills.

FY 2005 APPROPRIATIONS

Omnibus Bill On November 20, the House and Senate approved *H. Rpt. 108-792 -Consolidated (Omnibus) Appropriations for FY 2005.* The bill, which was signed by the President on December 8 (*P.L. 108 - 447*), provides funding for nine of the 13 annual appropriations bills. Of the nine bills, seven include provisions dealing with the construction and/or renovation of Federal facilities:

- Agriculture, Rural Development, Food and Drug Administration, and Related Agencies
- Commerce, Justice, State, and the Judiciary
- Energy and Water Development
- Interior and Related Agencies
- Treasury and Transportation
- Veterans' Administration, Housing and Urban Development and Independent Agencies

For details on these and other FY 2005 appropriations bills of interest, refer to the chart "FY

2005 Appropriations: Discretionary Funding" at http://www.eere.energy.gov/femp/newsevents/congress_initiatives.cfm.

Proposed Reorganization of Appropriations Subcommittees In recent weeks, various press reports have noted that Tom DeLay (R/TX), the House Majority Leader, is interested in reorganizing the structure of the House appropriations subcommittees. Media reports indicate that the thinking is still in the early stages and no final decisions have been made, but the intent is to regroup the subcommittees so that disparate Federal programs are not combined under the jurisdiction of the same subcommittee. In order for such a reorganization to have a positive impact on the overall appropriations process, the Senate would need to implement a reorganization plan similar to the final House plan. At this time, there is no indication that the Senate is interested in making any changes.

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FEDERAL AGENCY ACTIVITIES

DEPARTMENT OF DEFENSE (DOD)

No news of interest to report.

DEPARTMENT OF ENERGY (DOE)

Secretarial Nomination On December 10, President Bush announced his intention to nominate Sam Bodman to be the next Secretary of Energy. Dr. Bodman currently serves as the Deputy Secretary of the Department of Treasury and was previously the Deputy Secretary of the Department of Commerce. He is a former associate professor of chemical engineering at the Massachusetts Institute of Technology and has held senior positions in the financial and industrial sectors. Dr. Bodman holds degrees in chemical engineering and science. He is expected to receive quick Senate confirmation. Secretary Abraham plans to remain at DOE until Dr. Bodman is confirmed.

DOE Announces New User-Friendly Website On December 20, the Department announced a new website to help consumers save energy and money. By using the new site, consumers can obtain detailed information of a wide range of topics, including help in purchasing ENERGYSTAR® products, how to purchase a hybrid automobile, guidance for comparing energy efficient vehicles, and guidance for finding the lowest-priced gasoline at the local level. The site also provides users with information on Federal, state, and local government tax incentive programs and free software tools for saving energy in the home. For more information, visit the new site at http://www.EnergySavingTips.com.

2005 Regulatory Agenda In mid-December, DOE announced the agency's semi-annual regulatory agenda. The agenda includes numerous energy efficiency and renewable energy regulations involving appliance standards and test procedures, lighting, a code for new Federal

residential low-rise buildings, among other topics. For details, refer to the December 13, 2004 issue of the *Federal Register* (page 73106).

Meanwhile, the Department also announced plans to delay final promulgation of three appliance standards until 2007. The affected categories include:

- Commercial air conditioners and heat pumps
- Electric distribution transformers
- Residential furnaces and boilers

The agency's proposed standards for the three categories are expected to be published in the *Federal Register* by October 2006, instead of the original date of July 2005.

DOE NATIONAL LABORATORY ACTIVITIES

No news of interest to report.

ENVIRONMENTAL PROTECTION AGENCY (EPA)

No news of interest to report.

FEDERAL ENERGY REGULATORY COMMISSION (FERC)

No news of interest to report.

GENERAL SERVICES ADMINISTRATION (GSA)

No news of interest to report.

CENTRAL REGION

The Environmental Protection Agency will begin construction on a "green" new regional office in Denver, Colorado. The 231,000 square foot building will showcase a green rooftop, where vegetation will add to insulation by preventing sun rays from penetrating. The building will achieve 22 percent savings in energy consumption and 21 percent savings in heating and cooling costs with exterior sun shades and an air distribution system that utilizes air from the floor. The new building will join other local green buildings Federal Alfred A. Arraj U.S. Courthouse in Denver and the Boulder Community Hospital in Boulder. (Source: *The Denver Post,* November 1, 2004)

MID-ATLANTIC REGION

The Federal Aviation Administration's Airport Safety Technology Section will install solar-powered lights on the taxiway at Cross Keys Airport, the general aviation airport in Gloucester County, New Jersey. Ninety blue-light emitting diode lights will operate from dusk to dawn and will provide safety to remote sites with limited electricity for lighting. Over the next nine months, experts will check the lights for visibility and durability. These lights may eventually benefits thousands of small general aviation airports throughout the country. (Source: *RenewableEnergyAccess.com,* December 9, 2004)

MIDWEST REGION

No news of interest to report.

NORTHEAST REGION

No news of interest to report.

SOUTHEAST REGION

No news of interest to report.

WESTERN REGION

The U.S. Postal Service's (USPS) San Francisco Processing and Distributing Center is installing a hybrid solar photovoltaic (PV) and fuel cell power station to alleviate the facility's annual energy costs. The Department of Defense and the State of California are providing most of the funds to cover the $15 million project. "This fuel cell installation is an integral part of our overall mandate of reducing our energy costs while at the same time making a positive impact on our environment," said the USPS Interim National Environmental Program Manager, Ray Levinson. Chevron Energy Solutions (CES) who has been working with USPS, bought the 250 kW DFC300A stationary fuel cell from Fuel Cell Energy, their distribution partner. The two PV systems are mounted on a parking canopy with 185 kW and a flexible roof-minted array on the building with 100 kW. CES plans to continue to work with USPS to install energy efficient improvements in mail facilities throughout Northern California for a projected savings of $2 million in energy costs. (Source: *RenewableEnergyAccess.com,* December 2, 2004)

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STATE AND LOCAL GOVERNMENT ACTIVITIES

GENERAL ANNOUNCEMENTS

The American Council on Renewable Energy (ACORE) is calling for new national goals and a new public policy framework for renewable energy in the United States. At a forum on December 7, the organization introduced the idea that the country is ready to move forward with widespread utilization of renewable technologies. Since 1973, the United States has invested money into energy research, development, and demonstration. Now, ACORE suggests that the focus should be on public policies that deal with utilization of technologies. Discussions are still underway regarding next steps. *(Environmental News Service,* December 8, 2004)

CENTRAL REGION

The Kansas City Star, in Kansas City, Missouri, recently became one of only a few cities in the nation to mandate that new buildings be built to a "green" standard. This means that new municipal buildings must include features such as natural lighting and heating, fresher

air, and rooftop gardens. The standard may help save operating costs for "green" buildings. The City Council passed the ordinance unanimously. (*Kansas City Star,* December 14, 2004)

In recent years, Fort Worth, Texas, has upgraded the energy efficiency of its buildings through normal maintenance procedures. As a result, the city's electricity consumption for 2003 was 16 percent below the 2001 level. One of the city's current energy efficiency projects involves the retrofit of the municipal complex, including city hall. The programs were spurred by the recent Senate Bill 5, passed by the Texas Legislature in 2001, which requires Fort Worth and many other Texas cities and counties to implement cost effective energy efficiency measures. *(*U.S. Department of Energy*,* December 14, 2004)

Sites for Concentrated Solar Power (CSP) have been identified in New Mexico as part of Solar Power Task Force, commissioned by Governor Bill Richardson's (D) in April 2004. The feasibility study, conducted by Black and Veatch for the New Mexico Department of Energy, Minerals and Natural Resources (EMNRD), found the locations of Deming, Lordsburg, and Belen capable of supporting a 50 MW or greater CSP plant. By the end of year, SunLab, a research partnership between Sandia National Laboratory and the National Renewable Energy Laboratory, will use the Black and Veatch feasibility study to conduct an in-depth site analysis on the locations. CSP systems use the sun as heat source through parabolic-trough, dish/engine, and power tower. The Western Governors' Association and Department of Energy are funding the $1.8 million project through a cost-share agreement. (Source: *RenewableEnergyAccess.Com,* November 18, 2004)

MID-ATLANTIC REGION

Pennsylvania Governor Edward Rendell (D) signed a bill into law early this December requiring the state's electric utilities to draw on renewable energy and other alternative energy sources for a percentage of their electricity supply. By 2019, eight percent of the electrical supply must be derived from "Tier One" sources, such as solar power, wind power, low-impact hydropower, and geothermal energy. Additionally, ten percent of the power must come from "Tier Two" sources, including demand-side management, distributed generation systems, municipal solid waste, and waste coal. The bill specifically requires solar photovoltaic power to provide one half percent of the state's power by late 2019, a requirement that, according to the Solar Energy Industries Association, will yield 408 megawatts of solar power. The bill, called the Alternative Energy Portfolio Standards Act, also requires the state's Public Utilities Commission to establish a credit-trading system to help utilities meet the requirements and sets fees for noncompliance. Governor Rendell also signed the *Alternative Fuels Incentive Act,* which establishes a fund to help individuals and organizations buy alternative-fuel vehicles and convert existing vehicles to allow them to use alternative fuels. (U.S. Department of Energy, December 14, 2004)

The first West Virginia low impact hydropower project has applied for certification from the Low Impact Hydropower Institute (LIHI). Summersville Hydroelectric Project, designed by Gauley River Partners, Inc., is located on the Gauley River in Nicholas County, West Virginia. The City of Summersville, located five miles south of the dam, has a 50-year lease from FERC to operate the plant, which is located on Army Corps of Engineers land. The City of Summerville will operate the plant for another 25 years and receive the benefits of the energy produced. Public comments on the project are accepted until January 10; for details visit http://www.lowimpacthydro.org/appdetails.asp?x=3. LIHI has certified four other low impact hydroelectric projects with a combined installed capacity of 189 MW: Winooski One in Vermont; Bowersock in Kansas, and Hoosic River and Raquette River projects in New York.

MIDWEST REGION

In early December, Wisconsin Governor Jim Doyle (D) released the final report of his Task Force on Energy Efficiency and Renewables. The report recommends establishing a requirement to draw on renewable energy for ten percent of the state's electricity needs by 2015, and buying ten percent of their power from renewable energy sources by 2006. The report also recommends updating and improving the state's commercial building energy codes, requiring state agencies to buy energy-efficient products and appliances, and establishing goals or requirements for state facilities to exceed energy-efficiency codes. (U.S. Department of Energy, December 14, 2004)

Chicago, Illinois, recently developed the new Chicago Center for Green Technology, also known as Green Tech, the first municipally owned building in the world to earn the highest rating (platinum) in the Leadership in Energy and Environmental Design Program (LEED) designed by the U.S. Green Building Council. The building, which used to be the site of debris dumping, is equipped with a greenhouse, rainwater cisterns, and solar panels. A program to use solar heat for municipal swimming pools and add photovoltaics to the city's nine major museums is also underway. The city also added an eco-roof to its City Hall to capture rainwater and reduce heat island effect. (U.S. Department of Energy, December 10, 2004)

Navitas Energy, a commercial wind power developer based in Minneapolis, is looking to Brookings County in Minnesota, as a possible site for more than 100 wind turbines. The company has already installed two small wind turbines to test wind speed, according to Bob Hill, zoning director for Brookings County. For more information, visit http://www.aberdeennews.com.

Caterpillar, Inc., FuelCell Energy Inc., and the City of Westerville, Ohio, have installed the first utility-scale fuel cell power plant in North America to provide customers power through a substation. The 250 kW Direct FuelCell® unit (DFC), made by FuelCell Energy and distributed by Caterpillar's dealer Ohio Cat, is located at Westerville's substation #2. The DFC power plant makes hydrogen from natural gas. "This project demonstrates how public-private partnerships can work to bring new and emerging technologies to consumers today…Direct FuelCell® power plants which create hydrogen internally, can be used to bring clean, reliable power to the people of Ohio without waiting for the development of a hydrogen supply infrastructure," said Herbert T. Nock, FuelCell Energy's Senior Vice President of Marketing and Sales. Ohio Governor BobTaft's (R) Third Frontier Fuel Cell Initiative, designed to position Ohio as a leader in the fuel cell industry, provided funding for part of the project. (Source: *PRNewswire,* November 15, 2004)

Chevron Energy Solutions has launched an 18-county building energy conservation project in Washtenaw County, Michigan, using performance contracting. The project will provide the county's first solar electric installation, upgrades of building infrastructures, and energy management training for employees. The canopy of the Washtenaw County Courthouse's parking structure will include a10 kW solar photovoltaic generation unit to provide electricity to the underground parking garage. The new buildings will feature interior and exterior efficient lighting and controls; chiller, steam trap, and air handler unit replacements; new boilers; window improvements; upgraded energy management controls; and UtilityVision®, a web-based energy information system that will provide remote access to real-time energy data at each facility to improve maintenance and energy management. County taxpayers will save more than $215,000 a year in energy and operational costs. (Source: *Chevron Energy Solutions,* December 9, 2004)

NORTHEAST REGION

In an effort to catch up with other "green" cities, Boston officials are setting new rules and attempting to create a national model of urban environmental efficiency. Over a year ago, Boston instituted its Green Building Task force, which has just issued its findings, calling for new building standards for major projects, training for city employees in green policies, and incentives for firms that adopt pro-environment strategies. The next step for the city will be to seek the equivalent of a Silver rating (third from the highest) under LEED. (*The Boston Globe,* December 14, 2004)

The New York Public Service Commission is launching a retail energy supply guide to encourage consumers to explore supply offerings from competitive electric service companies (ESCOs). The guide, to be updated monthly as prices and supplies fluctuate, is based on data from both local utilities and electric and natural gas ESCOs that serve New York. The guide also provides information on price and service comparisons, contract terms and conditions, energy source choices, billing and payment options, and residential customer protections. The retail guide can be downloaded at http://www.askPSC.com

A new group savings plan, available through the Saratoga County Chamber of Commerce in New York, allows area business firms to save six to eight percent on their electrical bills. This program, now in its third year, has saved hundreds of chamber members tens of thousands of dollars. Savings are realized through the buying power of ten countywide chambers, tax credits and transfer credits. For more information on the plan, email bdevaney@saratoga.org.

SOUTHEAST REGION

The North Carolina State Energy Office and the North Carolina Solar Center are awarding grants across the state to combat U.S. reliance on imported oil and to improve transportation related emissions. The program, the North Carolina Alternative Fuel Incentive Project, will distribute over $90,000 from the State Energy Office to help increase the use of alternative transportation fuels throughout North Carolina. (U.S. Department of Energy, December 14, 2004)

The Florida Department of Environmental Protection and Earth 911 have opened the Florida Green Lodging Locator, a new online resource to help travelers locate environmentally friendly hotels and motels in Florida that are participating in the Green Lodging Certification program. Launched last March, the Florida Green Lodging Certification program assists hotels and motels in adopting practices which conserve water and electricity, reduce waste, and safeguard the environment. The Florida Green Lodging Locator provides the location of both certified lodges and those in the process of becoming certified, assisting users in locating a green facility, and also providing information about each of the lodge's conservation efforts. For more information visit http://www.floridagreenlodging.org or http://www.earth911.org.

WESTERN REGION

California regulators recently announced plans to force manufacturers to begin making consumer electronics more energy efficient. The new regulations, which apply to appliances that use energy even when turned off, are the first of their kind. The order was approved unanimously by the California Energy Commission, and calls for a reduction between one and three watts. Power adapters that use power even while off may draw only half a watt under the

new regulations. Manufacturers must phase in their energy efficiency products for sale in California by 2006, and comply fully by 2008. *(Greenwire,* December 16, 2004)

The Washoe Indian Tribe of Nevada and California earned the first-ever rebate check for installing a solar power system in Nevada. The tribe received a $33,185 rebate check from Sierra Pacific Power Company for installing a 7.5 kW solar power system on a small office building on Highway 395, southeast of Lake Tahoe. (U.S. Department of Energy, December 14, 2004)

Two new wind power plants are in the works for Washington and Oregon. In Washington, Blue Sky Wind, LLC is proposing to build a 150 MW wind power project in Columbia County, which should be completed by late 2005 or early 2006. In Oregon, Columbia Energy Partners, LLC is planning for build a 104 MW wind power project near Arlington, at about the center of the state's northern border. The Arlington Wind Farm will consist of 63 1.65 MW wind turbines and should be completed in 2005. (U.S. Department of Energy, December 14, 2004)

The Seattle City Council has passed an ordinance that will allow the city to acquire wind-generated power through 2020. This new legislation extends an agreement between Seattle City Light and the Stateline Wind Project near Walla Walla. The contract with Stateline provides 175 MW of wind-generating capacity, which produces an average of 54 MW per year, which is enough to power about 45,000 homes. (*Seattle Post-Intelligencer,* December 1, 2004)

California Governor Arnold Schwarzenegger (R) is expected to make public soon, a detailed version of the pro-deregulation plan he laid out during last year's recall campaign in which he was elected governor. Concurrently, officials are realizing they may face a power shortage earlier than expected. A number of new plant projects are stalled because of regulatory uncertainty, and older plants continue to operate under plans without upgrades. For more information, visit http://www.consumerwatchdog.org.

MULTIPLE REGIONS

The Federal Regulatory Energy Commission (FERC) citied two Arizona utilities, Arizona Public Service (APS) and Tucson Electric Power (TEP) Company, for abuse of their market-based open access transmission tariffs. FERC staff audits determined that the companies withheld key information from independent power suppliers that compete with their own power supply affiliates. FERC is forcing APS and TEP to give up $4 million and $25,000, respectively, in ill-gotten profits. *(Greenwire,* December 16, 2004)

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UTILITIES AND SUPPLIER ACTIVITIES

- Refer to Appendix A – Utility Rate Changes and Restructuring

CENTRAL REGION

- *Public Benefits*

On November 22, Kansas Governor Kathleen Sebelius (D) commented on recommendations given to her by a cabinet team for balancing conservation efforts and development of wind energy. Governor Sebelius will use the cabinet team's recommendations as well as those by her Energy Council to design an overall strategy for developing Kansas' wind energy potential while preserving agriculture and conserving critical ecosystems in the area. In her comments, she asked that parties in the potentially affected areas to remain patient while the teams review the strategy. For additional information, visit http://www.ksgovernor.org.

Empire District Energy Company has signed a 20-year contract with PPM Energy to purchase energy generated at the 150 MW Elk River Windfarm located in Butler County, Kansas. Empire predicts that it will purchase approximately 550,000 MWh of energy annually from the project, enough for about 42,000 homes. Brad Beecher, vice president, Energy Supply, stated that the "contract signing is a major step in ensuring that our customers benefit from a balanced mix of generation options". (*Energy Business Review,* December 16, 2004)

MID-ATLANTIC REGION

No news of interest to report.

MIDWEST REGION

- *Public Benefits*

Consumers Energy has made gift certificates available this holiday season. The certificates, available in $10, $20, $25, and $50 increments, can be bought at any Consumers Energy bill payment offices or through the mail. The gift certificates are anonymous, and recipients mail them in with the balance of their monthly payment. For more information about Consumers Energy, visit http://www.consumersenergy.com.

Alliant Energy Corporation confirmed plans that the company will add 50 to 100 MW of wind generation by the end of 2005 as part of the Forward Wind Energy Center near Brownsville, Wisconsin. This addition will bring the company's total wind energy portfolio to about 450 MW. The project was solicited as part of a request for proposals issued in the spring of this year, and is moving forward in part due to the passage of the *Federal Production Tax Credit (PTC)* legislation. The site will be located on an area of approximately 50 square miles in Dodge and Fond du Lac Counties and will contain 133 wind turbines. For more information, visit the company's web site at http://www.alliantenergy.com.

NORTHEAST REGION

No news of interest to report.

SOUTHEAST REGION

No news of interest to report.

WESTERN REGION

No news of interest to report.

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ENERGY AND NATURAL RESOURCES
PRIVATE SECTOR

GENERAL ANNOUNCEMENTS

The U.S. Green Building Council (USGBC) introduced the LEED (Leadership in Energy and Environmental Design) Green Building Rating System for Commercial Interiors (LEED-CI). LEED-CI, previously in pilot, is now fully launched and joins LEED for Existing Buildings (LEED-EB) and LEED for New Construction (LEED-NC) green building rating systems. LEED-CI addresses performance areas including: selection of sustainable tenant space, efficiency of water usage; energy performance optimization including lighting and lighting controls, resource utilization for interior building systems and furnishings, and; indoor environmental quality including comprehensive emissions criteria. A companion rating system, LEED for Core & Shell Development (LEED-CS), is being developed with LEED-CI to establish green building criteria for commercial real estate for use by both developers and tenants. (Source: *GreenBiz.com*, November 22, 2004)

The World Resources Institute's (WRI) Green Power Marketing Development Group has announced 62 MW of new renewable energy purchases and projects in the past year. Green-e® certified renewable energy certificates (RECs), supporting 21 MW of biomass generation and 18 MW of wind generation, comprise 39 MW; landfill gas will replace natural gases in several facilities for 21 MW and wind and solar will provide the final 2 MW of the purchases. These purchases add to the total sum of 174 MW the Green Power Group has acquired over three years. The members of the group are Alcoa Inc., Cargill Dow LLC, Delphi Corporation, The Dow Chemical Company, DuPont, FedEx Kinko's, General Motors, IBM, Interface Inc., Johnson & Johnson, Pitney Bowes, and Staples. Michael Eckhart, President of the American Council on Renewable Energy (ACORE) said, "such large purchases by well-known Fortune 500 companies signal that renewable energy is coming into the mainstream." The group intends to create 1,000 MW of cost-competitive green power for corporate markets by 2010. (Source: *Clean Edge News,* December 8, 2004)

U.S. Wind Farming, Inc. (USWF) has entered into several international development contracts with GE Wind Energy Technology and Stewart Energy's Decentralized Hydrogen Technology. As a result, USWF will install and own the next generation of integrated renewable energy systems utilizing advanced wind energy technology and

decentralized hydrogen technology. USWF will produce electricity and hydrogen for the residential, commercial and transportation industries on an international scale with full production by 2005. USWF expects their "Next Generation" Wind Energy Electricity/Hydrogen Cooperatives to generate at least 25 percent more revenue than the current generation wind energy projects. For more information, visit http://www.uswindfarming.com.

CENTRAL REGION

Wasatch Wind erected a 272-foot wind tower in Spanish Fork Canyon, Utah. Over the next six months, the potential wind will be studied and if the wind is considered a viable source, the City Council will need to change zoning lows to allow for more wind turbines. Further turbines would be installed next summer, with the potential to generate up to 6,000 MWh per year per turbine. (Source: *The Daily Herald*, November 10, 2004; *Desert Morning News*)

The Gray County Wind Energy Center on the southwest Kansas plains has generated more than one million MWh of electricity since opening three years ago. The center has replaced the equivalent of 606,000 tons of coal, or more than 12 billion cubic feet of natural gas that would have been used for electricity during its operation. The 170 turbine farm was constructed by FPL Energy in 2001. 100 MW of the electricity produced is used by Aquila's 69,000 customers in Kansas and 285,000 customers in Missouri, and the remainder, 10 MW is sold on the wholesale electric market. Keith Stamm, Aquila Senior Vice President and Chief Operating Officer said, "This wind production is a viable portion of our overall power generation. Although coal and natural gas fuels remain the foundation for generation, wind power provides environmental benefits for our customers." The center provides 5.5 percent of total power consumed by Kansas customers and 2.8 percent for Missouri customers. (Source: *Business Wire,* November 22, 2004)

MID-ATLANTIC REGION

Rock Run Recreation site in Cambria County, Pennsylvania, is assessing the area in preparation for wind turbines. Developers from Butler Company are testing the area with three 165-foot tall meteorological towers to determine if the area is viable for wind, which requires 14 to 16 mph wind for at least a third of the year. With enough wind and state and county approval, Rock Run could hold the largest wind farm in the state with up to 200 wind towers producing up to 400 MW. Generated electricity will feed the power grid of New York, New Jersey, and eastern Pennsylvania. The 6,300 acre property was purchased earlier this year for recreation by snowmobiles, all terrain vehicles, horses, and mountain bikes and will continue as a recreation site after the wind farm is installed. (Source: *Pittsburgh Post-Gazette*, December 14, 2004)

The National Association of Realtors (NAR) has opened the District of Columbia's first building to meet green standards. "It is one more way we are achieving our mission as an association to be the leading advocate in our nation's capital for our business and for property owners' rights. It also represents the important work our members do to help America's families achieve the dream of homeownership," said NAR President Walt McDonald. The building features efficient use of water and energy and an abundance of natural daylight and low-emitting materials to help create a worker- and visitor-friendly indoor environment. (Source: *Greenbiz.com,* November 1, 2004)

MIDWEST REGION

Two organizations in Jefferson City, Missouri, have received grants from Ameren SmartLights to install energy efficient lighting in public areas. The Jefferson City YMCA will upgrade lighting in their Knowles Building gymnasium. A $4,000 grant will supplement other lighting upgrades being made to improve the facility's lightning while reducing energy costs. The Rotary Centennial Project Committee, comprised of volunteers from four Jefferson City rotary clubs, will use their $1,000 grant to provide energy efficient lighting for a new historic park on Bolivar Street. (Source: *Jefferson City News Tribune,* December 3, 2004)

Calvin College in Grand Rapids, Michigan, has completed a LEED gold-rated building to replace the headquarters of their 90 acre ecosystem. Approximately two-thirds of the center's electricity needs are met by a rooftop photovoltaic system. Other building include gray water, processed through an indoor biomass; chemical composting toilets; recycled wood, resin and concrete building materials; insulated roofs and walls to reduce heat loss and cooling costs; motion detectors for lights; and windows that swing upon automatically to regulate temperature when the weather permits. The center was funded by personal donations and grants from the Grand Rapids Community Foundation, Frey Foundation, DTE Energy Foundation, and the Energy Office of Michigan. (Source: *Grand Rapids Business Journal,* November 1, 2004)

Michigan State University, the University of Michigan-Dearborn, Detroit Edison and other partners have worked with Ford to incorporate environmental-related features at the new Rouge truck plant in Dearborn, Michigan. A "living roof," consisting of 10.4 acres of green space on top of the truck factory is filled with plants, flowers, and a perennial ground cover that insulates the building and reduces energy costs, while doubling the normal useful life of the roof. Other features include a "Fumes to Fuel" system that converts paint exhaust fumes into electrical power, a storm water management system, and an abundance of natural light. The parking lot for new trucks is covered with a porous material that absorbs rainwater, filters it through layers of stones and reuses it elsewhere in the plant. Ford's complex has been recognized as the "Facility of the Year" by *Environmental Protection Magazine* and has received a Gold LEED rating from the U.S. Green Building Council and the Clean Air Excellence Award from the Environmental Protection Agency. (Source: *Pittsburgh Post-Gazette,* November 12, 2004)

Villa Park in DuPage County, Illinois, has a newly constructed police station that will soon be certified by the U.S. Green Business Council's LEED-NC. The 16,000 square foot facility took 13 months to be constructed. The complex features permeable paving in the parking and driveway areas, landscaping using native plants to eliminate the need for pesticides and irrigation, recycled content in the masonry and steel structure, high performance windows for energy efficiency, ceramic tiles made from recycled glass, motion-activated lighting, green roofs on both the main roof and the sally port roof, daylight dimming of all light fixtures for reduced electrical consumption, and heat recovery ventilation. (Source: *The Lombardian*, November 1, 2004)

NORTHEAST REGION

The MITRE Corporation has met the U.S. Green Building Council's standards in the construction of the MITRE Center, in Bedford, Massachusetts. The green building was added to the campus to provide meeting space for students and faculty. The Commonwealth of Massachusetts' Renewable Energy Trust provided a $415,000 grant to support green features such as entrance canopy with 1,200 square feet of embedded photovoltaic solar panels, and a 1,700 square-foot solar roof that generates 16,900 kWh of electricity annually. Marty Faga,

President and Chief Executive Officer of MITRE, stated, "This building is a bricks and mortar example of MITRE's commitment to our employees, sponsors, and the public interest." (Source: *RenewableEnergyAccess.Com,* December 6, 2004)

A recent study commissioned by the New York State Public Service Commission (PSC) found the region from New York's Jefferson and Clinton Counties to have close to 1,000 MW of power potential for wind farms. Project Manager of Atlantic Renewable Energy Corporation William Moore said that 1,000 MW of power would create about 60 jobs with royalty payments to landowners of $5 million to $6 million and $20 million to $30 million in extra revenues to municipalities. According to Moore, the PSC's implementation of a Renewable Portfolio Standard program is creating a market for more projects. Atlantic Renewable is currently developing a 150 MW farm and a smaller project in Franklin County and a 190-turbine wind farm in Flat Rock. Moore has identified new potential sites in St. Lawrence County and two in Jefferson County. (Source: *Watertown Daily Times,* November 22, 2004)

SOUTHEAST REGION

Mississippi State University's (MSU) Center for Sustainable Design is still saving energy, two years after being planned, designed, and opened. The building features a 15-kW solar photovoltaic array which stretches 82 feet by 18 feet by eight inches wide. SunWize technologies designed and installed the array, made of 104 Sanyo HIT modules with a maximum operating voltage of 600 V DC. The electricity generated goes into the Starkville Electric System. Most of the building's energy efficiency derives from a geothermal ground source heating and cooling system. Other energy saving features include wide overhangs to block summer sun and allow winter sun for heating; tall, clerestory and dormer windows to allow natural lighting; and highly reflective roofing material. A comparable building without energy saving features would cost approximately $27,600 but the MSU Center for Sustainable Design's energy use annual average is only $16,200. "This building is proof that new structures can be built without requiring significant energy for heating and cooling," Tom Cathcart, Co-Director of MSU Center for Sustainable Design, said, adding that state law now requires that new buildings incorporate energy efficient designs. The project was financed by a $3.6 million bond and with help from state Senator Hob Bryan (D) and the state Bureau of Buildings officials. (Source: *RenewableEnergyAccess.Com,* November 22, 2004)

WESTERN REGION

Homeowners Joe and Monique Sweeney have installed one of the first residential grid tie systems in the country. Granite Bay Solar installed the 6-kW solar electric system with GT 3.0 inverters provided by DC Power into their new 3,000 square foot home in Placerville, California. The system will receive the maximum $3 per watt incentive for residential systems in California. They will save approximately $2,000 per year with a daily output of 27 kWh per day. (Source: Xantrex Technology, Inc. press release, November 9, 2004)

U.S. Wind Farming (USWF) will re-power 45 MW of wind energy electric/hydrogen cooperatives in Palm Springs, Tehachapi, and Altamount Pass, California. USWF uses small, distributed 15 MW cooperatives with six to ten General Electric (GE) wind turbines on each property. By re-powering, outdated technology turbines will be replaced with advanced technology, aviary friendly, GE turbines. The 45 MW of power produced by the turbines will be sold to the utility during peak demand times. During of peak demand times, the electricity will be sold to Stuart Energy's Proprietary Decentralized Hydrogen Technology. USWF anticipates the contracts for 45 MW of wind energy electricity and hydrogen to provide the company with

$4.5 million in profits for the 30-year life span of the cooperatives. (Source: *Business Wire*, November 29, 2004)

WorldWater & Power Corp. unveiled the world's largest solar-powered irrigation pumping system at Seley Ranches, Borrego Springs, California. The AquaMax™ 267 kW system by WorldWater drives a 200 horsepower pumping system at the facility. Quentin Kelly, WorldWater's Chairman and Chief Executive Officer said, "Seley Ranches is leading the way by installing a state-of-the-art solar irrigation system, which will contribute to cleaner air and more efficient use of water resources." The grid-connected system may operate independently from the solar array, from the electrical grid, or from both sources if necessary. The system uses net-metering to return excess solar electricity to the utility for credit if it is not required by the Seley Ranches Facility. (Source: *SolarBuzz.Com,* December 10, 2004)

Downtown Los Angeles, California, will have its first LEED-certified downtown residential housing complex. Elleven, scheduled for completion in 2006, will encompass 400,000 square feet of housing, parking, and retail establishments in a 13-story tower. Elleveen will house 176 units and in Phase II, which will break ground in April 2005, add an additional 236 units. Phase III will include the addition of another 300 to 350 units. Residents will live in green buildings with natural light; low-emitting materials and finishes; water-efficient fixtures, appliances and landscaping; and a strong emphasis on the use of both locally manufactured and high-recycled-content construction materials. The South Park Stakeholders Group is developing the housing complex. (Source: *Business Wire,* November 15, 2004)

Pepsi Cola of Kalmath Falls, Oregon, has installed the Pacific Northwest's largest solar system, consisting of 172 kW total in three locations. The largest system at the company's main office and headquarters uses building-integrated photovoltaic technology (BIPV) with 1,042 laminated solar panels bonded to the metal roof for a 132 kW output. The Kalmath Falls Warehouse has a 29 kW system and the Lakeview solar system is 11 kW. Pacific Power will provide credit when all three systems flow into the local utility grid, as is required by contracts of the Energy Trust and the State of Oregon. Pacific Power pre-purchased green tags from Pepsi's solar facility, which also helped fund the project. Oregon customers may purchase one of three renewable options through Pacific Power's Blue Sky options. Funding for the project was provided by $210,000 in incentives from Energy Trust of Oregon, Inc., $444,412 in Business Energy Tax Credits from the Oregon Department of Energy, an accelerated state and Federal tax depreciation schedule, and a $950,000 loan from the Oregon Energy Loan Program. (Source: *Business Wire,* December 14, 2004)

INTERNATIONAL

ITC Center is the first corporate house in India to achieve a Platinum Green Building rating. Located in Sector 32, Gurgaon, the 180,000 square foot building features zero water discharge, 53 percent energy savings over conventional building, 40 per cent reduction in potable water use, use of grey water for flushing and landscaping, use of fly-ash in bricks and concrete, high efficiency equipment, green housekeeping practices and green education program. (Source: *The Financial Times Limited,* November 15, 2004)

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MEETINGS, CONFERENCES, AND TRAINING WORKSHOPS

- Refer to Appendix B – New Technologies
- Refer to Appendix C – Calendar of Upcoming Events

GENERAL ANNOUNCEMENTS

The Department of Energy's Federal Energy Management Program is holding a web cast, titled, "Creating Sustainable Federal Buildings" on the afternoons of January 11-12. The two-part seminar will provide an introduction to "green" buildings with case studies and address specific environmental topics, including site, water, energy, building resources, and indoor quality. For more information and to register for the course, go to http://www.eere.energy.gov/femp/newsevents/fullevent.cfm/events_id=1147.

The Environmental Protection Agency's Office of the Environmental Executive is offering a course titled, "What is "Green" Purchasing, Anyway?" at the Government Online Learning Center. The two and a half hour long online course is organized into modules to explain the basic concepts of green purchasing including the reasons for buying "green," the requirements of "green products," where to buy them, and required reporting. This course, designed for contracting personnel, purchase card holders, facilities managers, and fleet managers, satisfies *Executive Order 13101* requirement that agencies provide training to contracting and program personnel. For information on the course, go to http://www.golearn.gov/coursecatalog/index.cfm?fuseaction=oltoverview&intCourseID=5951&AddPopularity=1.

CENTRAL REGION

The Department of Energy's Federal Energy Management Program is holding a workshop titled, "Advanced ESPC/Financing," in San Antonio, Texas, on January 18-20. This workshop is intended for Federal agency personnel who are developing a Super ESPC delivery order and want to gain an in-depth understanding of the Super ESPC process, with special emphasis on the financial aspects. For more information and online registration go to http://www.eere.energy.gov/femp/services/training_super_espc.cfm.

The Electric Utility Consultants, Inc. (EUCI) is holding a workshop titled, "Wind Energy & Power Markets Conference," in Denver, Colorado, on February 2-3. The conference, held at the Marriott Denver City Center, focuses on the development of wind energy power markets, delivery of real value to utilities and users, wind energy economics; transmission interconnection issues, impact of regional transmission organizations, project financing and risk management, and streamlining environmental assessment and permitting processes. A pre-conference workshop, "Impact of Wind Generation on Transmission Grid," will be held on February 1 and a post-conference workshop, "Financing Wind Project," will be held on February 3. For more information and online registration go to http://www.euci.com.

The Department of Energy's Federal Energy Management Program is holding a workshop titled, "Implementing Renewable Energy Projects," in Denver, Colorado, on February 8-9. The two-day course focuses on implementing projects at Federal facilities using renewable technologies. The course includes a site visit to a local project. For more information and online registration go to http://www.eere.energy.gov/femp/services/training_implement.cfm.

RESNET is sponsoring a workshop titled, "RESNET Building Performance Conference," in San Antonio, Texas, on February 28 – March 2. The conference provides a forum on home energy ratings, residential energy efficiency financing, and building performance development. For more information and online registration go to http://www.natresnet.org/conference/default.htm.

KEMA is holding a conference titled, "Competition at the Crossroads: The Future of US Restructuring," in Austin, Texas, on February 3-4. The conference, held at the Four Seasons Hotel, will address the future of competitive power markets, choice for small and large customers, competition for smaller new entrants, the role of leading states and their policymakers, Wall Street's view on competition and retailers and the status of the customers. To view a brochure, go to http://www.pmaconference.com/KEMACompetitionCrossroadsFeb3.05.pdf.

MID-ATLANTIC REGION

Green Roofs for Healthy Cities and the Government of the District of Columbia are organizing the "Third Annual Greening Rooftops for Sustainable Communities" in Washington, D.C., on May 4-6. The conference will cover three main topics: policies and programs to support green roofs, green roof design and implementation, and research and technical papers on green roof performance. For more information, visit http://www.greenroofs.org/washington.

MIDWEST REGION

No information of interest to report.

NORTHEAST REGION

The magazines *Interiors & Sources* and *green@work* are hosting "EnviroDesign®9" in New York City, New York on April 20-22. The event, held at the Marriott Marquis, will highlight environmental stewardship and sustainable development in the public and private sector. Workshop sessions will cover ten tracks including green theory and design, green business practices, communities, case studies. product design and development, energy. materials, health and safety, future trends, and sustainable mobility. For more information, visit www.isdesignet.com/ED/index.html.

SOUTHEAST REGION

Greenprints and National Association of Home Builders are sponsoring the "2005 National Green Building Conference" in Atlanta, Georgia, on March 13-15. The conference will focus on cutting edge innovative green building technologies. The program will involve tours, exhibits, educational sessions, and awards. For more information, visit http://www.nahb.org/meeting_details.aspx?meetingID=3249&sectionID=121.

WESTERN REGION

The Department of Energy is sponsoring the "11th Annual National Clean Cities Conference" in Palm Springs, California, on May 1-5. The conference theme is "Guiding Transitions" and will cover regulations, product availability, and infrastructure of alternative fuel vehicles. For more information, visit http://www.afvi.org/palmsprings/index.html.

The Department of Energy's Federal Energy Management Program is holding a workshop titled, "Water Resource Management," in Las Vegas, Nevada, on March 1-2. The two-day course, with a two-hour long telecourse option, will focus on how to assess, evaluate, and incorporate water efficiency into Federal project-assessment, planning, and implementation programs. This course will help professionals incorporate water efficiency into daily operation in addition to assessments, planning and project retrofit programs at Federal facilities. For more information and online registration go to http://www.eere.energy.gov/femp/services/training_water_res.cfm.

The University of Oregon Sustainability Leadership Academy is holding a seminar titled, "Facilities Management" in Eugene, Oregon, on February 18. This one-day seminar will focus on applying principles and practices of sustainable measures to built facilities. For more information and to register online, go to http://center.uoregon.edu/course_desc.php?CourseKey=461679.

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STUDIES, REPORTS, AND ANALYSES

ENERGY AND WATER CONSERVATION

***Home Energy Briefs*, Rocky Mountain Institute,** 2004

These nine practical guides describe what a homeowner can do to save energy. Energy and money saving topics addressed are lighting, space cooling and heating, water heating, cleaning appliances, electronics, kitchen appliances, and building design. The 2004 Briefs update the first edition, written in 1994, with new statistics, expanded tables, and tips on how to apply energy efficiency at the residential level. The guides are available for download at http://www.rmi.org/sitepages/pid171.php#LibHshldEnEff.

SOLAR AND RENEWABLE ENERGY

***Green Power Vision and Strategy for Canada*, Pollution Probe,** November, 2004

The Canadian environmental group Pollution Probe has unveiled a clean energy strategy for Canada. Their report finds that Canada could install 41,400 of green power capacity by 2025, or 150 TWh of electricity generation. This report encourages Canada to move aggressively to take advantage of green power benefits such as rural development, job creation, energy security, clean energy technology exports, and air pollution reduction. Pollution Probe calculates that half of Canada's electricity can be supplied by green power. The report is available at http://www.pollutionprobe.org/whatwedo/greenpower/index.html.

MISCELLANEOUS

***Harnessing San Francisco's Clean Tech Future*, Clean Edge,** December 2004

The report, funded by the San Francisco Department of the Environment and the Mayor's Office of Economic and Job Development, examines energy and transportation and each sector's clean-tech's potential for San Francisco's economic growth. The report closely examines how these technologies can attract new jobs and businesses to the city. The report also describes winning activities implemented by the Cities of Chicago, Austin, and Portland, Oregon. Recommended strategies include appointing a clean-tech manager for the city, aligning the city's procurement goals, leveraging San Francisco's financial strengths, attracting flagship conferences, and partnering with other regional players. The report can be downloaded from http://www.cleanedge.com/reports/SF_CleanTech.pdf.

***Responding to Turmoil in Natural Gas Markets: The Consumer Case for Aggressive Policies to Balance Supply and Demand,* Consumer Federation of America,** December 2004

The report examines various policy options based on the economic, security, and environmental characteristics of the natural gas market. The authors concludes that a combination of efficiency, pipelined Alaskan gas, conventional and unconventional sources, coal gasification, and other steps will be necessary in preventing future shortfalls. Increased energy efficiency is the best way to ease prices and prevent natural gas shortages, while less effective tactics such as drilling in the outer continental shelf and other "sensitive" areas should be a low priority. Next year, Senator Pete Domenici (R/NM) Chair of the Congressional Committee on Energy and Natural Resources reportedly plans to use the report to help draft natural gas provisions of energy legislation. The report is available at http://www.consumerfed.org.

***Electricity Transmission in a Restructured Industry: Data Needs for Public Policy Analysis*, Energy Information Administration, U.S. Department of Energy,** December 2004

The report examines the success of existing official data and how well they serve the function of informing Federal policymakers about electric power transmission in interstate commerce. Data produced by the Federal and State governments, their agents, and regulated entities is official data. The report also identifies whether currently unavailable data will become obtainable, and identifies transmission information relevant to three national policy interests: reliability and national security, economic regulation, and economic growth and efficiency. The report is available at http://www.eia.doe.gov/oss/TransmissionDataNeeds-DH.pdf.

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APPENDIX A
UTILITY RATE CHANGES AND RESTRUCTURING

REGIONAL OFFICE	RATE CHANGES	RESTRUCTURING
General Announcements	• According to the North American Electric Reliability Council's 2004-2005 Winter Assessment, peak winter demand for power in North America will rise 2.7 percent above last year's peak, but improved generation and transmission systems should be adequate to get the electricity to customers.	• No news of interest to report.
Central Regional Office	• The Wyoming Public Service Commission has approved natural gas rate increases ranging from 5 to 14 percent for Kinder Morgan customers, due to higher than expected costs for natural gas.	• Green Mountain Energy Company is offering a renewable power plan comparable to the rates of TXU, the Dallas area's incumbent provider. The plan is a mix of hydroelectricity and wind power. • A contract between Oklahoma Gas and Electric Company and an affiliate, Enogex, Inc. may be overpriced, which could lead to higher electric costs for consumers. The Oklahoma Corporation Commission is trying to determine how much of the contract's costs should be passed to consumers. The new contract price is 42 percent higher than the previous contract between the two companies.
Mid-Atlantic Regional Office	• Customers of Allentown, Pennsylvania, area utility PPL will soon see an increase of about 8 percent in their electric utility bills. The average monthly bill for customers with electric heat will increase by $9.03. • PECO Energy of Pennsylvania, is cutting its natural gas rate, effective December 1. The price will drop 3.2 percent, saving customers an average of $3-$5 a month.	• No news of interest to report.

REGIONAL OFFICE	RATE CHANGES	RESTRUCTURING
Midwest Regional Office	• Vectren Corporation announced that the Indiana utility regulatory commission approved Vectren north base rate increase for its natural gas distribution business in 49 central and southeastern counties, implemented December 1. • Madison Gas and Electric Company will raise residential rates by 8.5 percent beginning in January 2005. Natural gas prices will decrease by 2.5 percent. The increase will help the company pay for a new power plant and offset high costs related to natural gas. • Wisconsin Public Service Corporation received verbal approval to increase electric (8.4 percent) and natural gas (1.1 percent) rates, expected to be effective January 1, 2005.	• FirstEnergy of Akron, Ohio, will conduct an auction to see if rates less than those of FirstEnergy Corporation are available to customers. Results could potentially mean a rate decrease.
Northeast Regional Office	• Franklin PUD hopes to raise electric rates by 10.5 percent on January 1, on top of an 11.5 percent surcharge added January of 2003. • Attorney General Richard Blumenthal asked Connecticut state legislators to block, reduce, or delay Connecticut Light and Power Company's proposed 16.7 percent electricity rate increase, saying the increase should be over a number of years to ease the impact on customers. • The Maine Public Utilities Commission set a one-year standard offer rate for electricity that will increase the average monthly residential electric rate about $10. The rate applies to customers in the Bangor Hydro-Electric Company and Central Maine Power Company service territories.	• No news of interest to report.

REGIONAL OFFICE	RATE CHANGES	RESTRUCTURING
Southeast Regional Office	• PSNC, the largest Durham, North Carolina, natural gas provider is increasing its residential rates by 13.4 percent to $1.27 per therm. The increase, tied to rising costs of natural gas, will increase an average monthly bill approximately $15. • South Carolina Electric and Gas Company will raise residential electric rates 4.44 percent starting in January 2005 as part of new base rates. The new rates will result in a monthly increase of $3.93 for residential customers.	• Paducah Power of Tennessee received approval from its board to send a contract cancellation notice to the Tennessee Valley Authority, effective December 21, 2009. This move will allow Paducah Power to solicit other contract, possibly resulting in lower rates for customers.
Western Regional Office	• Sacramento Municipal Utility District officials are considering a 6 percent rate increase to cover an increase in energy costs in the coming year. A proposed rate increase would take place by March 30, and would be varied for different types of customers.	• No news of interest to report.

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APPENDIX B– NEW TECHNOLOGIES

For informational purposes only. Listing does not imply endorsement.

TECHNOLOGY	MANUFACTURER	MANUFACTURERS CLAIM	CONTACT
		HVAC	
The Ruud Super Quiet 80 Gas Furnaces	Rheem Air Conditioning Div.	Quietest mid-efficiency, single-stage gas furnaces available. AFUE rating 80%; line's input rates range from 50,000 to 150,000 Btu. Features four-speed blower taps, unique combustion air options, and time-tested integrated furnace control.	http://www.rheemac.com
Duct Liner	Reflectix Inc.	Designed for use in HVAC sheet metal ducts to absorb unwanted noise from multiple sources, to reduce heat loss or gain, and to provide low air resistance. Natural fiber construction.	http://www.reflectixinc.com
Simplicity Intelli-Comfort and Elite HVAC controls	York	Monitoring capabilities. Provides flexibility in control set-up and precise control of HVAC systems for operating efficiencies; energy savings, and higher levels of comfort. Manage up to 250 light-commercial HVAC units and remotely contact up to six people.	http://www.yorkupg.com
Thermostat TH147-P	Aube Technologies Inc.	Compact electronic thermostat for central electric air conditioners as well as gas, oil, or electric furnaces and hydronic heating. Features an advanced temperature control to minimize temperature swings, seven-day programming and comes preprogrammed with an energy-saving schedule suitable for most households. Energy Star® qualified.	http://www.aubetech.com
AC (4P) Desuperheater	Doucette Industries Inc.	Heats potable water from recovered waste heat generated from air conditioning and refrigeration systems; available with multiple refrigerant circuits; for systems ranging from 5 to 200 hp. Reduces operating costs.	http://www.doucetteindustries.com

TECHNOLOGY	MANUFACTURER	MANUFACTURERS CLAIM	CONTACT
		LIGHTING	
The Optimized Digital Lighting (ODL)	Lighting Science, Inc.	LED (light emitting diode) light bulb with 100% digital and 100% solid-state, high-performance, low-cost LED floodlight. Rated for operation at 5.6 W.	http://www.lightingscience.com
		WATER EFFICIENCY	
NC® Class Cooling Tower	Marley	Delivers thermal performance, low maintenance, versatility of options, low sound levels, and high crossflow tonnage densities per box. Features high-efficiency fill and fans, gravity-flow water distribution, and efficient mechanical drive systems working together to offer maximum cooling with minimum power use.	http://www.marleyct.com
Model 1150 and Model 1160 Steam Humidifiers	Aprilaire	Model 1150 is a 12-pound-per-hour unit that features on-off control. Model 1160 is a 24-pound-per-hour unit featuring a modulating output that regulates the operation of the humidifier based on the humidity needs of the building. Compatible with both standard tap and softened water.	http://www.aprilairecontractor.com
Rockton™ Toilet	Sterling Plumbing	Dual Force flushing technology; provides water savings and powerful, single-flush performance option of selecting one of two water levels either 1.6 gallons or .8 gallons.	http://www.sterlingplumbing.com
		ENERGY MANAGEMENT TOOLS	
The Environmental Monitoring Solution (EMS)	Sensicast	End-to-end temperature and humidity monitoring system; designed to use the company's sensor networking platform and SensiNet networking software. Real-time environmental monitoring; remote sensing probes; wireless EMS node transmits temperature, humidity, supervisory, and low-battery information to the central management console; displays real-time and historical temperature and humidity information.	http://www.sensicast.com

TECHNOLOGY	MANUFACTURER	MANUFACTURERS CLAIM	CONTACT
Shark 100	Electro Industries/GaugeTech	High-performance revenue-grade panel meter. High-end 0.2% meter performance and economical pricing. Well-suited for large scale implementation.	http://www.electroind.com
ION 7550 and 7650 Energy and Power Quality Meters	Power Measurement	Monitors key distribution points and sensitive loads. Combine power-quality compliance reporting functions, sampling rates as high as 1,024 samples per cycle, and enhanced communications options. New ANSI optical port.	http://www.pwrm.com
MISCELLANEOUS			
UPS with Kinetic Power Cell Technology	Caterpillar	1,2000kVA, 960kW, 60 Hz uninterruptible power supply (UPS) system with kinetic power cell technology. Provides high-speed voltage regulation and power factor improvement with a full-rated, continuous-duty static bypass switch and local emergency power off. System supervision is possible via remote monitoring.	http://www.caterpillar.com
Glass Consult	IQ Glas	Energy efficient heating glass window system with radiant heat that directly warms the people in the room, not just the air around them. Features a double pane structure with thin metal oxide coating inside and outer pane has a special coating that keeps heat inside while repelling cold air.	http://www.iqglas.com
Sunovation GmbH	IQ Solar	Solar cell panels are semi-transparent, flexible, and highly adaptable in architectural design.	http://www.iqsolar.com

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APPENDIX C
MEETINGS, CONFERENCES, AND OTHER EVENTS

NOTE: New events are highlighted in blue.
DOE-sponsored events are highlighted in green.

FEMP Training Calendar: http:// www.eere.energy.gov/femp/newsevents/events.cfm

ONLINE

DATE	EVENT	SPONSOR
January 7, 2004	Distributed Generation Short Courses Course 2: Fuel Cells	Association of Energy Engineers
January 10, 2004	3D Load Profiling Using Interval Meter Data	Association of Energy Engineers
January 10, 2004	HVAC Controls Short Course: Course 1: Introduction to HVAC Controls Course 2: Advanced HVAC Control Strategies	Association of Energy Engineers
January 11-12, 2005	**Creating Sustainable Federal Buildings (web cast)**	**Department of Energy's Federal Energy Management Program**
January 12, 2004	Energy Auditing Fundamentals	Association of Energy Engineers
January 18, 2004	Pitfalls and Profits in Performance Contracting	Association of Energy Engineers
January 18, 2004	Facilities Management: Essentials & Critical Strategies for Success	Association of Energy Engineers
January 10 – February 18, 2005	PV Design Online	Solar Energy International
Ongoing	**What is "Green" Purchasing, Anyway?" Online Course**	**U.S. Office of Personnel Management and the Environmental Protection Agency's Office of the Federal Environment Executive**
Ongoing	**FEMP Lights**	**Department of Energy's Federal Energy Management Program**

CENTRAL

DATE	EVENT	SPONSOR
January 18-20, 2005	Advanced ESPC/Financing San Antonio, TX	Department of Energy's Federal Energy Management Program
January 20-21, 2005	Harvesting Clean Energy V Great Falls, MT	Montana's Office of the Governor and Office of the Secretary of State, National Center for Appropriate Technology, U.S. Department of Energy and many others
February 2-3, 2005	5th Wind Energy & Power Markets Conference Denver, CO	Electric Utility Consultants, Inc.
February 3-4, 2005	Competition at the Crossroads: The Future of US Restructuring Austin, TX	KEMA
February 8-9, 2005	Implementing Renewable Energy Projects Denver, CO	Department of Energy's Federal Energy Management Program
February 28-March 2, 2005	RESNET Building Performance Conference San Antonio, TX	RESNET
May 10-13, 2005	The Industrial Energy Technology Conference New Orleans, LA	American Chemistry Council, Global Energy Partners, LLC and EPRI, Louisiana Department of Natural Resources, Sempra Energy Solutions, Spirax Sarco, Inc., Texas State Energy Conservation Office, and U.S. Department of Energy
May 15-17, 2005	Spring Electric Energy Conference Albuquerque, NM	Rocky Mountain Electrical League
May 15-18, 2005	Windpower 2005 Denver, CO	PPM Energy, Vestas America, American Corn Growers Foundation, American Corn Growers Association, Renewable Energy Systems, EnXco, Milbank, Alliant Energy and MA Mortenson Company

MID-ATLANTIC

DATE	EVENT	SPONSOR
March 23-24, 2005	Globalcon 2005 Atlantic City, NJ	Association of Energy Engineers, Select Energy, NYSERDA, New Jersey's Clean Energy Program and others
March 29 – April 1, 2005	NHA Annual Hydrogen Conference 2005 Washington, D.C.	National Hydrogen Association
April 10-12, 2005	Engineering Sustainability 2005 Pittsburgh, PA	University of Pittsburgh's Mascaro Sustainability Initiative in the School of Engineering
May 4-6, 2005	**Third Annual Greening Rooftops for Sustainable Communities Washington, D.C.**	**Green Roofs for Healthy Cities and the Government of the District of Columbia**

MIDWEST

DATE	EVENT	SPONSOR
February 1-2, 2005	Better Buildings: Better Business Kalahari Resort, WI	Alliant Energy, Energy Center of Wisconsin, Focus on Energy, Wisconsin Energy Star Homes, Xcel Energy and others
February 2-3, 2005	Momentum is Building Des Moines, IA	Iowa's Electric Cooperatives and Iowa Energy Center
February 16-17, 2005	Midwest 2005 Building and Design Exchange Chicago, IL	Building and Design Exchange

NORTHEAST

DATE	EVENT	SPONSOR
March 15-17, 2005	Building Energy 2005: The Practice of Sustainability: Art, Science, Business! Boston, MA	Northeast Sustainable Energy Association
April 20-22, 2005	The TFM Show Chicago, IL	The TFM Show and the U.S. Green Building Council
April 20-22, 2005	**EnvironDesign®9 New York, NY**	**Interiors & Sources and green@work Magazines**

DATE	EVENT	SPONSOR
May 4-6, 2005	13th National Conference on Building Commissioning New York, NY	New York State Energy Research and Development Authority and Portland Energy Conservation Inc.

SOUTHEAST

DATE	EVENT	SPONSOR
June 20-23, 2005	Ecobuild America Orlando, FL	Delphi Inc., Grupo Decosi S.A. de C.V., Specifications Consultants in Independent Practice, Building Green Inc., BNP Media, ESRI, Pella Windows & Doors, and Spiderweb Inc.
March 13-15, 2005	**2005 National Greenbuilding Conference Atlanta, GA**	**Greenprints**

WESTERN

DATE	EVENT	SPONSOR
January 13-14, 2005	**Sustainable Governance Seminar Eugene, OR**	**University of Oregon Sustainability Leadership Academy**
January 26-27, 2005	**HVAC Systems and Controls Renton, WA**	**Department of Energy's Federal Energy Management Program, Department of Energy Region X, Avista Utilities, Benton County PUD, Puget Sound Energy, City of Richland and many others**
February 8, 2005	**Introduction to Building Commissioning Spokane, WA**	**Department of Energy's Federal Energy Management Program, Department of Energy Region X, Avista Utilities, Benton County PUD, Puget Sound Energy, City of Richland and many others**
February 18, 2005	**Facilities Management Eugene, OR**	**University of Oregon Sustainability Leadership Academy**

DATE	EVENT	SPONSOR
March 1-2, 2005	**Water Resource Management Los Vegas, NV**	**Department of Energy's Federal Energy Management Program**
March 1-3, 2005	POWER-GEN Renewable Energy Las Vegas, NV	Renewable Energy Access, GE Energy, and Navigant Consulting
March 3, 2005	**Efficient Lighting Fundamentals Renton, WA**	**Department of Energy's Federal Energy Management Program, Department of Energy Region X, Avista Utilities, Benton County PUD, Puget Sound Energy, City of Richland and many others**
May 1-4, 2005	**11th National Clean Cities Conference Palm Springs, CA**	**Department of Energy**

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